

Abstract:

The present invention relates to a process for preparing a key intermediate of cefprozil and use of this intermediate in the preparation of cefprozil thereby avoiding impurity-causing self-acylation.

- 5        [R-(Z)]-[4-hydroxy- $\alpha$ -[(3-methoxy-1-methyl-3-oxo-1-propenyl)amino]]  
benzeneacetic acid, mono potassium salt is reacted with ethyl chloroformate to  
obtain mixed anhydride which is then silylated with *N,O*-  
bis(trimethylsilyl)acetamide. The silylated compound obtained is reacted with [7-  
trimethylsilylamino-3-(Z/E-propen-1-yl)-3-cephem-4-carboxylic acid]trimethylsilyl  
10 ester and deprotected with aqueous hydrochloric acid to give cefprozil.